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14. ABSTRACT Human factors including personal, psychological, and physical stressors can strain members of the force and precipitate adverse incidents that may impair operational effectiveness and jeopardize force protection. To mitigate that risk, operational commanders charged simultaneously to accomplish the mission and ensure force protection need accurate, timely information regarding human factors potentially impinging on service member performance or judgment. Toward that end, the U.S. Naval Aviation community and the U.K. Royal Navy in recent years have instituted Human Factors Councils or their equivalent in order to identify the human factors that impact service members, facilitate mitigation of the risk, and provide commanders with the information they need to make sound decisions regarding factors that could impair the performance or judgment of members of the force. Because the efficacy of Human Factors Councils has been documented and the need for human factor assessment in support of deployed operational forces is high, Human Factors Councils should be implemented for all forward-deployed Joint forces to enable operational commanders to achieve assigned objectives and safeguard the health of the force.					
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Human Factor Assessment in Support of Joint Operations

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Preface

To garner the perspectives of operational commanders on the strengths and challenges of implementing human factors assessment for forward-deployed forces, the author conducted live interviews and elicited electronic responses from over fifteen commanders who are currently deployed or have recently returned from theater. My sincere appreciation to the following officers who shared their time and their insights in the development of this proposal: Barry Adams, Mark Bieger, Robert Bellfield, John Clink, Brian Cook, John Cunningham, Michael Dillender, Richard Ellingham, Philip Fatolitis, Tom Isom, David Ivezic, William Mangan, Andrew McClelland, Ethan Olberding, David Simpson, and David Wilson.

Abstract

Human factors including personal, psychological, and physical stressors can strain members of the force and may precipitate adverse incidents that impair operational effectiveness and jeopardize force protection. To mitigate that risk, operational commanders charged simultaneously to accomplish the mission and ensure force protection need accurate, timely information regarding human factors potentially impinging on service member performance or judgment. Toward that end, the U.S. Naval Aviation community and the U.K. Royal Navy in recent years have instituted Human Factors Councils or their equivalent in order to identify the human factors that impact service members, facilitate mitigation of the risk, and provide commanders with the information they need to make sound decisions regarding factors that could impair the performance or judgment of members of the force. Because the efficacy of Human Factors Councils has been documented and the need for human factor assessment in support of deployed operational forces is high, Human Factors Councils should be implemented for all forward-deployed Joint forces to enable operational commanders to achieve assigned objectives and safeguard the health of the force.

INTRODUCTION

When Staff Sergeant Robert Bales left his Kandahar province outpost before dawn on March 11, 2012, and killed seventeen Afghan villagers, most of them women and children, the incident stoked smoldering Afghan resentment of night raids, sparked public outrage, and ignited political pressure potentially jeopardizing key aspects of counterinsurgency operations.¹ Upon learning of Sergeant Bales' "raid," Afghan President Karzai demanded that U.S. forces pull out of local villages and back to major bases,² a move that would undercut the forces' leveraging of proximity to earn the people's trust and guard their safety. Although President Karzai subsequently moderated that demand, he renewed pressure to transfer oversight of night raids to Afghan authorities, potentially restricting the raids' timing and effectiveness.³

The impact of Staff Sergeant Bales' brutality on the mission of American and coalition forces in Afghanistan has been marked. It is the third of four damaging incidents which have unfolded just this year, preceded by the release in January of video images of Marines urinating on insurgent corpses and the report in February of the burning of Korans by American soldiers, and followed by the posting in April of photos of 82nd Airborne Division soldiers posing with suicide bomber remains.⁴ The circumstances surrounding these events are under investigation, but each raises troubling questions about the impact of immediate or cumulative stress on service members' capacity to maintain military professionalism and perform appropriately.

These questions are of particular concern to operational commanders who are responsible for successful prosecution of the mission even as they remain responsible for the protection of the force from threats not only physical but psychological. To accomplish the latter, they need timely, accurate information as much as they need it to achieve operational objectives. Institution of an interdisciplinary Human Factors Council to identify and address the impact of operational and personal stresses on forward-deployed service members would

provide operational commanders with critical information to support operational effectiveness, facilitating the mitigation of risk stemming from stress-related human factors likely to affect service member performance or judgment.

A FORCE UNDER STRAIN

Fierce challenges confront forward-deployed forces daily. Hazardous missions in high-risk environments exact a heavy toll, psychologically as well as physically.⁵ Operational objectives impel the application of force. Destruction and carnage are common. The mettle of the force is exposed.

Forces ashore increasingly confront a chaotic mix of challenges nearly simultaneously and in environments that pose an array of challenges. Aptly labeling this phenomenon “the three block war,” General Charles Krulak, USMC, detailed its ramifications:

The rapid diffusion of technology, the growth of a multitude of transnational factors, and the consequences of increasing globalization ... have coalesced to create national security challenges remarkable for their complexity. By 2020, eighty-five percent of the world’s inhabitants will be crowded into coastal cities ... lacking the infrastructure to support their burgeoning populations.... Long simmering ethnic, nationalist, and economic tensions will explode and ... an increasingly complex and lethal battlefield (will emerge). The lines separating the levels of war, and distinguishing combatant from “non-combatant,” will blur, and adversaries confounded by our conventional superiority will resort to asymmetrical means to redress the imbalance.⁶

Forces deployed into these environments increasingly face what Carl von Clausewitz called “the fog of war,”⁷ and while the wars in Iraq and Afghanistan have provided ample evidence of the intense demands of this congested environment ashore, the attack on the USS *Cole* in 2000, violent tactics of pirates at sea, proliferation of shore- and sea-based threats to maritime forces, and the rising concentration of the world’s population in coastal cities confirm that the challenges to forces afloat are correspondingly acute.

To achieve operational objectives in these progressively strained and radically diverse contexts, operational commanders face force protection challenges unprecedented in scope.

Threats, both external and internal, proliferate. Vigilance is essential to assure operational protection and safeguard both the effectiveness of the force and its survivability. As Milan Vego observes, “operational protection specifically aims to protect the physical capabilities and moral strength of ... combat forces,”⁸ and while physical threats merit particular concern, the threat posed by lapses of performance and errors of judgment attributable to stress can be equally severe. Vego’s assertion that “no component of operational protection stands alone”⁹ is indisputable. Accordingly, nothing less than full spectrum force protection will suffice to preserve the physical, mental, and moral health of the force.

While threats to segments of the force frequently emerge at the unit level, their impact is often operational. Hence, according to Vego, “operational force protection focuses on protecting large service or functionally based forces ... from enemy attacks ... (and) hazards on the battlefield” but to be broadly effective must also take steps necessary “to maximize survivability ... (and) preserve the health of personnel.”¹⁰ Indeed, Joint Publication 3-0 focuses commanders’ attention on “preserving the joint force’s fighting potential” in a host of ways including health protection, which “complements force protection efforts by promoting, improving, preserving, or restoring the mental or physical well being of Service members.”¹¹ In the fog of war, the mission requires it and those who are serving deserve nothing less.

Department of Defense mandated Combat Operational Stress Control (COSC) programs support operational commanders in exercising this responsibility by providing targeted programs aimed at “early detection and management of combat and operational stress reactions (COSR) ... to preserve mission effectiveness and warfighting capabilities and mitigate the adverse physical and psychological consequences of exposure to severe stress.”¹² Not only do they provide commanders with critical information regarding COSRs, they “foster an environment and climate of prevention and protection to enhance operational performance”

and mitigate potentially adverse consequences,¹³ but by focusing predominantly on combat-triggered stress reactions, these programs neglect to give adequate attention to a host of stressors of personal origin that, on their own or in combination with COSRs, can generate physical or psychological reactions no less severe. Stresses have a cumulative and interactive effect, regardless of their origin, making recognition of their toxicity particularly challenging.

The incident involving Staff Sergeant Bales is illustrative. The factors that may have triggered or contributed to his violent spree have yet to be identified, but questions regarding several possible causes have already emerged in the aftermath. Were his actions attributable to his succession of four deployments or possible traumatic brain injury? Was he driven by recent or cumulative combat stress exposure, including an improvised explosive device (IED) attack that injured a friend just days before? Was he despairing over personal financial troubles at home, lingering legal issues, or marital strife? Was his outburst fueled by excessive alcohol consumption, and did he have a history of alcohol-induced lapses? These and other questions remain unanswered, at least until the investigation is complete, but what is certain is that signs of some of these issues were probably apparent to one or another person with whom Staff Sergeant Bales had significant contact before the event, and if the risk had been identified it might have been possible to avert a tragic outcome for the Afghan families affected, for Staff Sergeant Bales, and for those with whom he served. Prior identification of the stresses affecting this soldier – the human factors – might have made it possible to mitigate the strain, avert his subsequent actions, and avoid the decidedly negative impact on the operational effectiveness of American and coalition forces to which his actions led.

PROTECTING THE FORCE

The adverse impact of service member stress on operational effectiveness is a principal concern of commanders, according to a North Atlantic Treaty Alliance (NATO) human

resources study on military leaders' perspectives on psychological support to operations.¹⁴

Over 170 commanders from the United States and fifteen member nations responded to inquiries regarding the personal and psychological fitness of forces under strain. Affirming that the psychological well-being of the force is not only an individual but also an organizational responsibility, the participants, all of whom had recent operational experience and many of whom had undertaken multiple deployments, focused in particular on the role of command leadership in monitoring and safeguarding the health and well-being of the force. To exercise that responsibility, the NATO respondents expressed broad agreement that the commanding officer needs reliable information from those best suited to assess the level of stress and its impact on the psychological health of service members, both individually and collectively. As experienced commanders themselves, the respondents insisted that commanders "are not alone in this task" and require timely input from those who, by virtue of their professional training and/or assigned role, can offer an informed perspective and make recommendations regarding the risks associated with both combat and personal stresses and the means by which such risks can be mitigated.¹⁵ Respondents identified, in particular, the role of psychologists, psychiatrists, chaplains, and medical personnel.¹⁶ Several commended the role of trained peers.¹⁷ Those surveyed endorsed an interdisciplinary approach to "operational psychological fitness," "during-mission screening to identify those having problems," and "regular/routine meetings" to leverage collaboration and assure that commanders receive timely information.¹⁸

While many of those participating in the NATO study expressed dissatisfaction with existing resources, structures, and programs supporting the personal and psychological health of their respective forces, the concept of an interdisciplinary forum to assess risk and advise the commander is not entirely new. United States Naval Aviation leadership, faced with data indicating that up to 80 percent of aviation mishaps stem from human factors,¹⁹ mandated the

institution of Human Factors Councils (HFCs) and Human Factors Boards (HFBs) twenty-five years ago.²⁰ The councils monitor “the personal and professional characteristics of all aircrew who regularly fly” while the boards are convened only when “the ability of an aircrew to safely perform his/her flight duties is in question.”²¹ In the naval air community, where performance lapses and errors of judgment have often led to catastrophic outcomes, the need for such assessment is clear. Accordingly, the instruction states:

Human factors continue to be the leading causal factor of aircraft mishaps. All too frequently, at least some portion of the mishap crew’s human factors issues were known by various supervisors and peers, but only as isolated pieces of the whole picture. Unfortunately, the pieces are typically not assembled until after a mishap. Specifically, there are two basic human traits that often contribute to a mishap:

- (a) Personnel fail to demonstrate the knowledge, skill, or discipline necessary ...
- (b) Personnel are often under serious stress from personal or professional factors (or) problems that are not apparent to the unit’s decision makers. This stress may lead to fatigue, distraction and degraded performance, including instances of poor judgment, excessive risk-taking or poor aircrew communication and coordination.²²

Human factors, as delineated in the instruction, include everything from operational tempo to “that set of personal and professional circumstances which may interfere with an individual’s ability to aviate effectively,” including stressors stemming from medical, psychological, professional, or personal problems.²³ “Death or severe illness of a family member or friend, divorce or failed personal or family relationship, newborn child, and financial difficulties” are specifically cited as the type of human factors which merit attention in the personal realm.²⁴

Naval Air Human Factors Councils meet at least quarterly and are comprised of the squadron commanding officer, flight surgeon, operations or training officer, aviation safety officer, a junior officer, and an enlisted aircrewman (if appropriate). When convened, the HFC reviews and assesses the personal and professional circumstances of those who regularly fly. To safeguard the integrity of the forum, no other matter is discussed and “detailed examination of sensitive personal or professional matters” is avoided.²⁵ The council provides

a non-punitive forum and “is intended to be a preventative first step” toward identification and mitigation of immediate or cumulative stresses and their impact on performance.²⁶ It focuses solely on identifying and addressing human factors, its deliberations being “intended as tools for commanders which will better enable them to make informed decisions concerning the influence of human factors relative to the mission and safety performance of air-crews.”²⁷ Alternatives available to the commander once the council provides input span “a broad range of options” from “creative scheduling” to guidance, counseling, or other remedies.²⁸ Human Factors Boards, though convened less frequently, address only specific cases and only when necessary, for example in circumstances under which “a preponderance of life stressors ... or unknown personal stress” are affecting an individual’s performance.²⁹

Human factors assessment, along with other safety enhancement measures, has reduced the incidence of naval air mishap fatalities by over 75 percent, according to the Naval Aviation Schools Command, Pensacola, Florida.³⁰ Twenty-five years after Human Factors Councils were instituted they have been fully integrated into the aviation safety matrix. Affirming their impact, Commander David Ivezic, the associate director of the school who has logged over 400 flight hours over Afghanistan and Iraq and recently served for a year as Afghan Air Force Safety Officer and Advisor, observes:

One of the proven foundational aspects of safety systems is that it enables and enhances mission effectiveness by identifying hazards and provides a systematic framework in which to reduce the risks associated. Human Factors is the largest group of risk factors related to mishaps and mission failure, perhaps ten times more so than equipment failure. While we devote large amounts of resources to identify equipment failures through inspections, engineering analysis, testing, and maintenance, we spend very few resources identifying impending failure in our most hazardous resource, the human. The Human Factors Council provides a tool to the leadership to identify impending human failure using multiple perspectives from (identified) personnel. One person can’t possibly know everything about everybody in their command, but a gathered spectrum of members from across the (command) can piece together a pretty clear picture.³¹

Although Commander Ivezic makes clear that this is his personal view and does not necessarily represent official Navy or DOD policy, the sustained use of human factors assessments by Naval Aviation for twenty-five years speaks for itself. Moreover, the effectiveness of Human Factors Councils in reducing aviation mishaps navy-wide recently led the 2nd Marine Air Wing to institute such councils after experiencing an unacceptably high number of incidents resulting in death or serious injury.³² Assessment of the impact of human factors has been widespread in commercial aviation for many years.³³

The U.S. military is not alone in adopting a human factors approach to safeguard the safety and well-being of its force. In the United Kingdom, the Royal Navy has conducted human factors assessments on personnel at naval shore establishments (and informally onboard many ships) for nearly a decade and recently directed that the practice be expanded to all units navy-wide.³⁴ In response to increased incidence of depression, substance abuse, deliberate self harm, suicide, and other stress factors impacting the British sea services, the Royal Navy formally extended its equivalent of Human Factors Councils (called “Carers’ Forums”) to all units in order to assure “unit operational effectiveness.”³⁵ Purposely drawing together representatives from various disciplines, the Royal Navy calls for participation by representatives from “Executive, Divisional Officers, Medical, Chaplaincy, and Naval Personal and Family Service (NPFS) and/or Royal Marines Welfare (RMW) practitioners,” where possible, to “develop professional contacts and relationships,” build mutual trust, and share “appropriate information ... in confidence ... to provide support to vulnerable individuals in a coherent fashion.”³⁶ In practice, this interdisciplinary forum may include other personnel well-situated to observe the impact of human factors on service members, including legal representatives and enlisted peers trained in the exercise of what the Royal Navy terms “the Service’s duty of care.”³⁷ The forum convenes “at a frequency appropriate to the ... unit”

but not less than bimonthly so as to assure that it has adequate opportunity to “exchange information in order to identify current issues of concern among unit personnel, to initiate appropriate action, and to share lessons learned.”³⁸ It is responsible for monitoring trends, not merely incidents, and its exchange of perspective and information is not only deemed beneficial to the command but “invaluable in maintaining morale, discipline and welfare.”³⁹

A Royal Navy Commodore (O-7) thoroughly familiar with human factors input by the Carers’ Forum considers it to be so valuable that, in his opinion, “the forum should meet regularly (weekly) and not be interrupted by the operational tempo – that’s when you need it most!” According to the Commodore,

Changes in the behavior of individuals can be abrupt and obvious to all leading, following or managing them. However, in the majority of cases the change ... is more subtle, over a period of time, and manifests itself in different ways to different people.... The main output is to piece together a jigsaw of events or interactions with individuals that are of concern, to look for themes, causes, etc.,

to implement strategies to mitigate risk, and to provide appropriate support to the individual.⁴⁰

Another proponent, a Royal Navy Commander actively engaged in Carers’ Forum, insists that it is an “extremely useful mechanism for a commander” in two key respects.⁴¹ “It assists (the commander) with his fundamental duties to deliver operational effect and to have a duty of care to those under command. In the first instance, it helps to identify individuals or teams (facing) stresses which may impact or impair their performance. In the second, it helps to ensure appropriate support and management is available to those individuals/teams.”⁴²

Drawing an analogy to mechanical issues affecting operational effectiveness, the former Command Chaplain of HMS *Ark Royal*, points out that:

An individual who is burdened with an issue may be less focused and therefore less effective ... issues ‘at home’ are magnified or have greater intensity when individuals are deployed/separated from loved ones. Onboard a ship it is a fact that if anyone is not focused on the job ... operational effectiveness can be (negatively) affected. Think of it like this. From an engineering perspective,

if a piece of kit goes down onboard, operational effectiveness is affected and the command must know several things: What's wrong with it? Can it be fixed? How long before it's back on line? How will it affect operational effectiveness? The SME answers those questions and offers a solution. If we believe that our people are our greatest asset it is prudent to have such a forum to advise the command how (to) help and maintain individuals when the need arises. In other words, the forum acts as the body of professionals, the SME's, who advise the command ... in order to care for and support the individual (and) maintain ... operational effectiveness.⁴³

The efficacy of Royal Navy's Carers' Forum is sufficiently clear that many commanders instituted the forum in their units well before it was mandated navy-wide and even when the full range of interdisciplinary participants was not available. In the words of the Commodore, "of course, the output from such forums are invaluable to any commander who values his people, understands the strain that operational deployment places on everyone's well-being and the importance of understanding better how someone might react in an operational environment – better to understand that during the eve of battle than during an operation..."⁴⁴

A HUMAN FACTORS COUNCIL FOR FORWARD-DEPLOYED FORCES

The impact of Human Factors Councils in reducing the incidence of performance lapses and errors of judgment within the U.S. Naval Aviation community, their adoption by the Marine Corps, and the success of their counterpart in the Royal Navy, coupled with the pronounced need for a mechanism that conveys critical information about human factors to operational commanders, commends the implementation of the human factors model force-wide, to include Joint forces forward-deployed. Institution of an interdisciplinary Human Factors Council to identify and address the impact of human factors on such forces would facilitate the identification and mitigation of risks associated with personal stress likely to affect service member performance and judgment, provide operational commanders with information essential to assure protection of the health of a force under strain, and fortify overall operational effectiveness.

Mirroring the best practices employed when constituting such forums in military organizations, an instruction establishing a Human Factors Council force-wide should contain a statement of the situation to provide context and a mission statement to provide focus. (See sample set forth in Appendix A). Additionally, the instruction should contain a clear statement of commander's intent and a defined concept of operations detailing the process and its framework, scope, and limits. (See sample set forth in Appendix B).

The instruction should stipulate that meetings are to focus solely on human factor identification and risk mitigation; follow prescribed meeting guidelines, procedures, and established worksheets or matrices; respect the confidentiality of the service member and the limits on disclosure which confidentiality imposes on medical personnel and the chaplain; and provide accurate, timely information to the commander to facilitate effective decision making.⁴⁵ A clear distinction should be made between Human Factors Councils, which assess the human factors affecting members of the force, and Human Factors Boards, which are convened by the commander in specific cases to develop a tailored "individual plan of action."⁴⁶ The non-punitive nature of HFCs and HFBs should be stipulated to maintain the integrity of the forum. Such practices are consistent with parallel practices followed in the private sector.⁴⁷

To assure effectiveness, council composition, the periodicity of meetings, and the range of factors subject to review should be specified. In these areas in particular, however, the need for specificity must be balanced with the need for flexibility to enable adaptation. With respect to council composition, for example, best practices suggest that representatives should be present from executive, medical, chaplain, and psychological/psychiatric disciplines, when possible, and where appropriate, disciplinary/legal, unit leadership, and/or peer representatives may be added. However, operational tempo, proximity of the participants, and other circumstances may limit who can be present, and when they do, council/board composition

should be constituted by those able to attend, provided that at a minimum, executive, medical, and one other representative are available.

With respect to the periodicity of meetings, best practices span a range of intervals from weekly to quarterly based on particular circumstances and perceived needs. Ultimately the frequency must be determined by the commander, who is in the best position to assess the need, gauge the impact on operations, and establish an appropriate interval, although if the interval between meetings is too long the timeliness of assessment and input may be compromised. Another dimension of meeting frequency that merits commander attention is the recent arrival or impending departure of a segment of the force, since the window of greatest vulnerability for those forward-deployed is the first and last 30 days in theater.⁴⁸ Attending to service member safety and well-being in these windows is particularly important and imparts added significance to the commander's determination of the timing and frequency of council sessions.

Finally, the range of human factors meriting attention should be described in terms sufficiently broad to assure that attention is focused on critical factors while allowing the council or board latitude to assess particular factors that may emerge, perhaps unexpectedly, in specific situations. Among the factors that should be considered are operational issues including the nature of the mission, operational tempo, recent events, number of deployments, length of time in theater, and observed changes in caliber of the member's performance, for example, and personal issues including relationship stress due to recent marriage, separation, or divorce, grief stemming from the death or illness of a family member or friend, medical ailments affecting the service member directly, adjustment issues, legal or financial issues, and changes in demeanor. (Additional information regarding human factors meriting consideration is set forth in Appendix C). Additionally, specific components of the force whose concerns merit particular attention should be identified, for example Individual Augmentees (IAs), whose

performance and demeanor may be less well-known among those with whom they are serving, or other personnel for whom what constitutes a change in behavior may be difficult to assess.

Without question, commander support is crucial. To gauge commanders' attitudes toward the institution of such a forum, the writer interviewed or communicated electronically with over fifteen commanders currently or recently serving in forward-deployed operational positions. When asked, "in your view, would such an interdisciplinary human factors council provide a valuable forum to identify and assess human factors issues of operationally deployed personnel?" all answered affirmatively. A U.S. Army Colonel highlighted "three critical things" a human factors council would achieve:

First, (to) ensure that the chain of command has an appropriate level of insight into their military service member ... Second, to allow command teams at each echelon to not only be more cognizant of the stresses on their personnel but to share 'plans of action' ... Third, to enable immediate access to 'experts' in terms of immediate assistance or insights. This would enable overall operational effectiveness in that it would allow for commanders to see what stresses are occurring on their force (more broadly), if there are trends developing, and to determine when and how they should act to ensure the individual gets the help they need and to take action to ensure the overall effectiveness of the force as a whole ... for example if there is a trend of reckless behavior, criminal activity, or marital stress ... Lacking a forum tends to drive unwittingly toward a crisis⁴⁹

Another emphasized that "the council would prove valuable (because) the issues identified and conclusions made would ... consider the 'friendly human terrain' factors ...allow(ing) commanders to focus (awareness) on the current mental status" of their personnel.⁵⁰

Two operational commanders currently in theater responded on the basis of recent personal experience:

... where the impacts of a mistake are very high and cause high collateral damage, it (a human factors council) would be very valuable ... a lot of issues ... exist because the leadership has not taken the time to 'know' and understand their Soldiers and therefore be able to identify abnormal behavior and indicators before an incident happens. I like to say that we need to get to the 'left of the bang' and be able to proactively identify and address issues before they reach the 'bang' where we are then only reactive and forced to do damage control. Understanding that the operational

environment is very dynamic and potential behavioral stressors are constantly changing, this type of forum could be very useful, mainly because it can be hard for commands to track all the potential issues that an individual is undergoing.⁵¹

The other, a Task Group Commander afloat, recalled:

We had a Sailor who had a negligent discharge early on in the deployment to the 5th Fleet. Fortunately, no one was injured and no equipment was damaged. While at Captain's Mast, it became apparent that he had several significant and recent life events which caused him to operate in the red zone of the Operational Stress Continuum. Each person in his chain of command knew a separate piece of information about one or two of the events. But the entire picture was not revealed until after the unfortunate incident. Had the command been able to put together all of the pieces of the puzzle beforehand, we would have not allowed this Sailor to have handled a weapon in the first place, and the negligent discharge would have been prevented. As the saying goes, hindsight is 20/20.⁵²

To get to the “left of the bang” and avoid dealing with human factors issues on the basis of hindsight, the operational commanders approached by the author echoed the views expressed by participants in the NATO study: a forum to assess human factors, propose means to mitigate them, and provide commanders with timely information would offer significant benefit.

PRACTICAL OBSTACLES TO EFFECTIVE IMPLEMENTATION

Despite broad support for the concept of a human factors council, reservations expressed by some of those contacted raised the strongest arguments against instituting such a forum. A principal critique offered by four of the respondents is the potential for abuse of the forum, negating its legitimacy and potentially leaving those strained by human factors in more dire straits than they would have been if no council existed. A U.S. Army Colonel who recently served in Korea worried that such a forum would risk being employed for “forensic or investigatory purposes,” sacrificing its credibility as a body charged to promote mitigation of human factors not prosecute those suffering from them.⁵³ Commander Ivezic of the Navy School of Aviation has witnessed such abuse first-hand and observes, “In the U.S. Navy we find that commanders using (aviation) human factors councils as a ‘witch hunt’ to find and punish violators will quickly lose any and all benefits the council provides.”⁵⁴ A critical element of this

is trust,” said another, “if this is lost, confidence in the chain of command is lost and the ability to see problems as they are developing will be lost as a greater effort will be made to conceal them.”⁵⁵ “Without command support and clear guidelines, the legitimacy with Soldiers, Sailors, and Marines will be undermined,” said a commander just back from Afghanistan.⁵⁶

A second argument against constituting a human factors council is that key members of the forum are bound by a duty of confidentiality that could prohibit them from disclosing important information, thereby negating the very purpose of the council to identify human factors and find ways to mitigate them. Specifically, commanders raised concern about doctor-patient privilege and the chaplain’s obligation to maintain confidentiality. One commander stated that, in his view, doctors and chaplains would need to relinquish confidentiality for the forum to be worthwhile,⁵⁷ but confidentiality belongs to the patient or penitent, not the doctor or chaplain. Indeed, that commanders holding this view might assert it in the context of the human factors council is one of the reasons that its credibility could be called into question by those it seeks to support. As one U.S. Army Colonel put it, “if confidentiality is lost, confidence in the council is lost.”⁵⁸

A third argument against instituting a human factors council force-wide is that it could frequently be infeasible to convene the forum when forward-deployed due to on-going operations, rapidly changing circumstances, or unavailability of key personnel (particularly psychological, psychiatric, chaplain, or medical). If the council does not convene sufficiently often, its capacity to make prompt assessments and provide the commander with timely information is undercut. “The whole purpose of the forum would be prevention,” noted one commander,⁵⁹ so if the council cannot meet regularly and reliably, it could fail in its fundamental purpose.

Yet the principal arguments against establishing a human factors council for forward-deployed forces all pertain to the means of conducting such a council credibly rather than the

legitimacy or effectiveness of such a council itself, provided clear guidelines are established and the council is conducted properly. The concern regarding the legitimacy of the council and the credibility of the command can be safeguarded by reinforcing the expectation that the council be a non-investigatory, non-punitive body focused solely on identifying human factors, developing ways to mitigate them, and discretely providing that information to the command. Adherence to these principles is crucial but attainable with command resolve.

Concern about confidentiality can be addressed by medical and chaplain participants taking the initiative to request service member permission to speak at the council or board on their behalf, a request likely to be granted due to the relationship of trust established between the member and the provider of his physical or spiritual care. Moreover, even if a particular medical or chaplain participant lacks such permission, other medical or chaplain representatives who are not similarly bound, if present, would be able to offer their perspective, and even those who are bound by confidentiality might, with appropriate discretion, be able to offer non-specific observations or input useful to the council and possibly the command.

Finally, the concern about recurring infeasibility of convening the council can be addressed by establishing norms for participation that are sufficiently flexible to allow the council to proceed if as few as three members can take part. Alternatively, the commander could direct the rescheduling of meetings cancelled or postponed due to operational necessity.

CONCLUSION

Instituting an interdisciplinary human factors council for forward-deployed forces would enhance operational force protection and support the accomplishment of operational objectives by identifying the human factors that strain members of the force, facilitating the mitigation of risk associated with operational and personal stress, and providing operational

commanders with reliable, timely information to support decision making. Rather than breeding mistrust, such a forum would build trust between the force and its leadership. In the words of one operational commander, “when Soldiers know you care, they will ensure they focus on the mission at hand.”⁶⁰ Yet perhaps more important than the trust it builds is the trust it fulfills: the trust placed in operational commanders to safeguard the health and well-being of those who serve under them, protect the force, accomplish the mission, and bring their men and women home.

An effective Human Factors Council would provide immediate benefit to service members experiencing the greatest strain and the commanders under whom they serve, but by enabling and facilitating the mitigation of risk associated with human factors and thereby preventing adverse events, mishaps, or tragedies, the council would be serving the broader force and the overall mission, also. As one commander put it, “by taking care of the five percent, you provide significant reassurance to the ninety-five percent.”⁶¹

Moreover, the force of the future needs the leadership of seasoned veterans who have endured and overcome the challenges of personal and operational stresses, and having done so have a respect for the weight of human factors and the importance of identifying and mitigating them to safeguard the service member, protect the force, and be ready when the next mission comes. “Who will be the ‘dusty, crusty guys’ in a few years – who will be our legacy – if we don’t care for those who face significant challenges now?” asked one commander, adding “we need these guys.”⁶² In the end, this is the deepest truth: we need one another. Life and its challenges press on us all. By recognizing the need for action and responding when it matters, we do more than avoid potential tragedy. We honor those who serve.

Appendix A

Sample situation description and mission statement for an instruction instituting a

Human Factors Council and Human Factors Board for forward-deployed joint forces:

Situation: Human factors continue to be a leading causal and/or contributing factor in adverse incidents and mishaps. Frequently, some portion of the human factors issues confronting those involved were recognizable to or known by trusted leaders or peers, but only as isolated pieces of the whole picture. Unfortunately, the pieces are often not assembled into a coherent whole until after an adverse incident, mishap, or tragedy has occurred. Specifically, service members are often under serious stress due to personal or professional factors or problems that are not immediately apparent to the command. Moreover, cumulative stresses have a compounding effect, particularly when forward-deployed in operational environments. The effects of stress can be severe and may lead to fatigue, distraction, degraded performance, and/or impaired judgment, including excessive risk-taking or other hazardous behavior, potentially jeopardizing the safety and well-being of the individual, the force, and/or others.

Mission: The Human Factors Council (HFC) provides a forum for the identification of human factors affecting service members and the means of mitigating them while serving as a mechanism to provide human factors input to the commander, who can then use this information for risk assessment and subsequent decisions regarding the safety and well-being of the service member, the force, and/or others. All service members in the command, whether assigned or attached, shall be within the purview of the Human Factors Council. A Human Factors Board (HFB) may be convened by the commander in specific cases warranting focused review in acute situations.

Situation descriptions and mission statements in related instructions are also illustrative.⁶³

Appendix B

Sample statement of commander's intent, affording the commander the opportunity to articulate his or her vision for Human Factors Councils and Human Factors Boards:

Commander's Intent: To sustain operational effectiveness and assure the protection of the health and well-being of the force, it is essential to identify and mitigate the human factors which may cause and/or contribute to adverse incidents, mishaps, or tragedies potentially jeopardizing the safety and welfare of individual service members, the force, or others. The strain generated by human factors, if left unaddressed, can impair judgment, endanger lives, undermine operations, and even undercut the mission. We have a responsibility not to let that happen and share a duty to look out for one another, preserve the force, protect the populace, and achieve our nation's objectives. The Human Factors Council and Human Factors Board provide a forum to identify human factors affecting members of the force, develop courses of action to moderate their impact, and provide the command with timely information necessary to make sound decisions safeguard those affected.

Sample concept of operations, establishing the parameters for Human Factors Council and Human Factors Board implementation and detailing the process to be employed, its scope, and limits:

Concept of Operations: Human Factors Councils (HFCs) and Human Factors Boards (HFBs) are intended as tools for commanders to enable them to make informed decisions concerning the impact of human factors on the mission and the safety and well-being of the force. Assessments made by HFCs/HFBs are to be accomplished within the framework of a risk management process, following the principles of Operational Risk Management (ORM). Effective and timely use of HFCs/HFBs should enable commanders to assure that appropriate steps are taken to mitigate identified human factors and prevent adverse incidents and mishaps detrimental to the mission and the safety, health, and welfare of the individual, the force, and others.

Situation descriptions and mission statements in related instructions are also illustrative.⁶⁴

Appendix C

Assessment of human factors entails consideration of apparent problems or challenges, discernment of possible causes, and evaluation of indicators that human factors are generating or are building toward potentially adverse consequences. In some instances, a problem relating to performance, medical condition, legal/disciplinary matters, or personal or spiritual issues may surface first, but most often, one or more indicators will become apparent in advance of the problem presenting itself. Human Factors Councils are most effective when they detect such indicators in advance of a problem emerging. The range of indicators is broad, and any attempt to identify the factors which should be assessed is at best descriptive, not exhaustive. Those charged with human factors assessment should be provided sufficient leeway to consider any behaviors, patterns, trends, or events which indicate or could indicate that an individual is under significant strain. A sample list follows.

Human Factors Review and Risk Assessment Checklist

Problems: Poor or Degraded Performance, Physical Challenges or Symptoms, Fatigue, Emotional Exhaustion, Altered Demeanor, Decreased Coping Ability

Possible Causes: Exceeding Personal Capacity, Insufficient Ability or Training, Lack of Motivation, Inadequate Preparation, Physical Injury or Illness, Substance Use or Abuse, Emotional Stress, Inadequate or Excessive Exercise, Weight Change, Change in Sleep Pattern, Relationship Issues, Personal Issues including Birth of a Newborn or Expectation of a Child, Death or Illness of a Family Member or Friend, Marital Strife, Divorce, Separation, Impending Significant Change, Financial, Legal or Disciplinary Issues, Other Issues Exceeding Resources

Indicators: Workplace Errors, Errors of Omission, Inattention to Detail, Deviation from Instructions or Procedures, Repetitive Mistakes, Degradation in Performance, Decreased Attentiveness, Complacency, Apparent Tiredness, Sleep Disruption, Paleness, Signs of Illness, Increased Risk Taking, Confusion, Perceptual Distortion, Irritability, Lapses of Judgment, Recurring Lateness, Mounting Responsibilities, Easily Distracted, Preoccupied or Fixated, Change of Demeanor or Personality, Apathetic, Withdrawn, Anxious, Negative Attitude, Euphoric Attitude, High Emotionality, Accident Prone⁶⁵

Factors Additional to Those Listed Above: Loss of Meaning or Purpose, Isolation, Withdrawal, Reduced Sense of Belonging, Self-Worth, or Confidence, Indecisiveness, Restlessness, Acute Sadness or Guilt, Uncooperativeness or Cooperative But Impaired, Lack of Concentration, Forgetfulness, Nervousness, Numbness, Loss of Interest, Loss of Trust, Despondency, Loss of Courage or Hope, Despair, Thoughts of Death or Suicide

End Notes

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- ¹ James Dao, "U.S. Identifies Army Sergeant in Killing of 16 in Afghanistan," *New York Times*, 16 March 2012, national edition, sec. 1.
- ² Matthew Rosenberg and Helene Cooper, "Karzai Lashes Out at NATO Over Deaths," *New York Times*, 16 March 2012, national edition, sec. 1.
- ³ Alissa J. Rubin, "U.S. Transfers Control of Night Raids to Afghanistan," *New York Times*, 8 April 2012, national edition, sec. 1.
- ⁴ David Zucchino, "U.S. Troops Posed With Body Parts of Afghan Bombers," *Los Angeles Times*, 18 April 2012, sec. 1.
- ⁵ Thomas W. Britt, Carl Andrew Castro, and Amy B. Adler, eds., *Military Performance* (Westport, CT: Praeger Security International, 2006), 15.
- ⁶ Charles C. Krulak, "The Strategic Corporal: Leadership in the Three Block War," *Marines Magazine*, January 1999.
- ⁷ Carl von Clausewitz, *On War*. ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 101.
- ⁸ Milan N. Vego, *Joint Operational Warfare: Theory and Practice* (Newport, RI: U.S. Naval War College, 2007), VIII-95.
- ⁹ Ibid.
- ¹⁰ Ibid., VIII-96, 97.
- ¹¹ Chairman. U.S. Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0 (Washington, DC: CJCS, 2011), III.6.d, III-31.
- ¹² U.S. Department of Defense, *Maintenance of Psychological Health in Military Operations*, DoDI 6490.05 (Washington, DC: DOD, 2011).
- ¹³ Ibid.
- ¹⁴ Paul Cawkill and Amy Adler, *Military Leader Perspectives of Psychological Fitness* (Neuilly-sur-Seine, France: NATO, 2006).
- ¹⁵ Ibid., 11A-1. See also Paul Cawkill, et al., *The Military Leaders Survey: NATO Military Leaders' Perspectives on Psychological Support on Operations* (Neuilly-sur-Seine, France: NATO, 2006).
- ¹⁶ Paul Cawkill and Amy Adler, *Military Leader Perspectives of Psychological Fitness* (Neuilly-sur-Seine, France: NATO, 2006), 11A-4, 11A-5.
- ¹⁷ Ibid., 11A-5.
- ¹⁸ Ibid.
- ¹⁹ Naval Aviation Schools Command, *A Guide to Human Factors for Naval Aviators* (Pensacola, FL: School of Aviation Safety, 2007).
- ²⁰ Commander, Naval Air Force U.S. Pacific Fleet, *Human Factors Council and Human Factors Board Policy and Procedures* (San Diego, CA: U.S. Pacific Fleet, 21 October 1997).
- ²¹ Ibid.
- ²² Ibid.
- ²³ Ibid.
- ²⁴ Ibid.
- ²⁵ Ibid.
- ²⁶ Ibid.
- ²⁷ Ibid.
- ²⁸ Ibid.
- ²⁹ Ibid.
- ³⁰ Philip Fatolitis (Naval Aviation Schools Command), telephone interview by the author, 29 March 2012.
- ³¹ David Ivezic (Associate Director, U.S. Navy School of Aviation), email message to author, 30 March 2012.
- ³² Commanding General, 2d Marine Air Wing, *2d Marine Aircraft Wing (2d MAW) Mentorship and Human Factors Council Program (MHFC)*, WgO 1500.58 (Cherry Point, NC: 2d Marine Air Wing, 17 November 2010). See also, Commanding General, MCIWEST, *Human Factors Council and Human Factors Board Policy and Procedures*, Commanding General's Policy Letter 14-10 (Camp Pendleton, CA: MCIWEST, 29 November 2010).
- ³³ Vince Mancuso, *Moving from Theory to Practice: Integrating Human Factors into an Organization* (Atlanta, GA: Delta Air Lines, November 1995).

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- ³⁴ Director Naval Personnel Strategy, Royal Navy, *Naval Personnel Management: Carers' Forums in Units and Establishments* (Portsmouth, UK: Fleet Publications, October 2011).
- ³⁵ Ibid.
- ³⁶ Ibid.
- ³⁷ Ibid.
- ³⁸ Ibid.
- ³⁹ Ibid.
- ⁴⁰ Royal Navy Commodore, email message to author, 2 April 2012.
- ⁴¹ Royal Navy Commander, email message to author, 28 March 2012.
- ⁴² Ibid.
- ⁴³ Royal Navy Chaplain, email message to author, 21 April 2012.
- ⁴⁴ Royal Navy Commodore, email message to author, 2 April 2012.
- ⁴⁵ See, e.g., Commander, Naval Air Force U.S. Pacific Fleet, *Human Factors Council and Human Factors Board Policy and Procedures* (San Diego, CA: U.S. Pacific Fleet, 21 October 1997); Commanding General, 2d Marine Air Wing, *2d Marine Aircraft Wing (2d MAW) Mentorship and Human Factors Council Program (MHFC)*, WgO 1500.58 (Cherry Point, NC: 2d Marine Air Wing, 17 November 2010); Commanding General, MCIWEST, *Human Factors Council and Human Factors Board Policy and Procedures*, Policy Letter 14-10 (Camp Pendleton, CA: MCIWEST, 29 November 2010).
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- ⁴⁸ Thomas Isom (Colonel, U.S. Army), interview by the author, 23 March 2012.
- ⁴⁹ William Mangan (Colonel, U.S. Army), interview by the author, 19 March 2012.
- ⁵⁰ U.S. Army Major, email message to author, 3 April 2012.
- ⁵¹ U.S. Army Lieutenant Colonel, email message to author, 16 March 2012.
- ⁵² U.S. Navy Commander, email message to author, 24 March 2012.
- ⁵³ Thomas Isom (Colonel, U.S. Army), interview by the author, 23 March 2012.
- ⁵⁴ David Ivezic (Associate Director, U.S. Navy School of Aviation), email message to author, 30 March 2012.
- ⁵⁵ William Mangan (Colonel, U.S. Army), interview by the author, 19 March 2012.
- ⁵⁶ Brian Cook (Lieutenant Colonel, U.S. Army), interview by the author, 28 March 2012.
- ⁵⁷ U.S. Army Colonel, interview by the author, 24 March 2012.
- ⁵⁸ U.S. Army Colonel, interview by the author, 19 March 2012.
- ⁵⁹ U.S. Navy Commander, email message to author, 24 March 2012.
- ⁶⁰ U.S. Army Major, email message to author, 3 April 2012.
- ⁶¹ William Mangan (Colonel, U.S. Army), interview by the author, 19 March 2012.
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- ⁶⁴ Ibid.
- ⁶⁵ Robert A. Alkov, *Aviation Safety: The Human Factor* (Casper, WY: Endeavor Books, 1997), 161-63.

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